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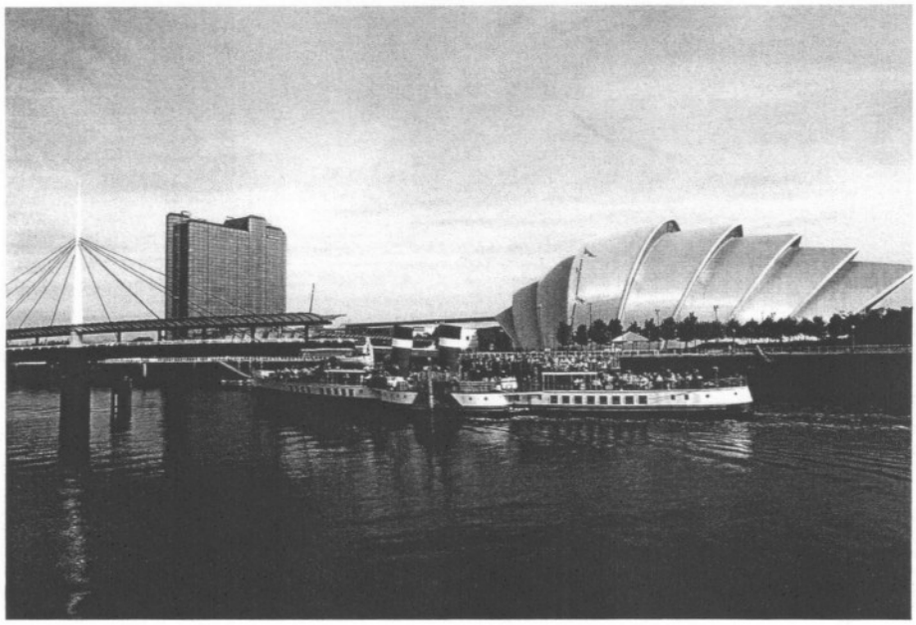

Scottish Exhibition and Conference Centre
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Programme & Abstract Book

Synthesis and Reactivity of N'-acylanthranylhydrazides

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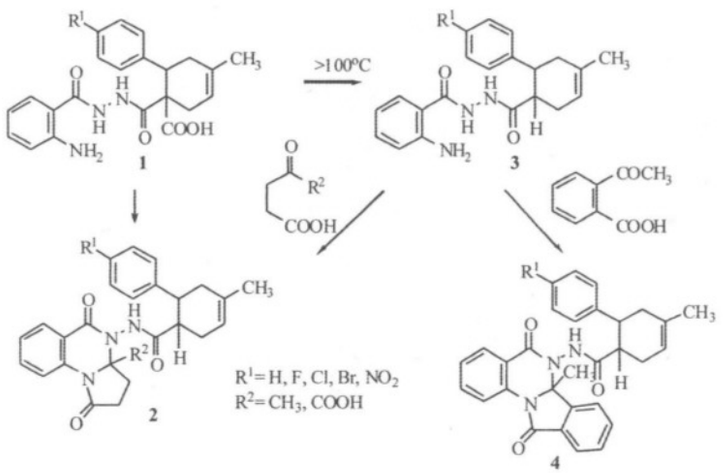
Polyheterocyclic structures containing fused quinazolines are attractive molecular scaffolds due to their broad spectrum of biological activities. Thus, pyrrolo-quinazoline fragment can be found in natural alkaloids[1] and in pharmaceutically active substances.[2] This has lead to extensive studies of their synthesis. We proceeded to the synthesis of novel derivatives of 4-amino-tetrahydro-pyrrolo[1,2-*a*]quinazolines which can be viewed as amide-linked-conjugates between the above mentioned fused heterocyclic system and a carbocycle. Starting from commercially available Meldrum's acid and benzaldehydes, 2'-N-substituted anthranylhydrazides **1** can be synthesised in 4 steps.[3] The desired cyclohexenecarbonylamino-tetrahydro-pyrrolo[1,2-*a*]quinazolines **2** can be prepared with aliphatic keto acids in final step.



We have found that compounds **2**, prepared from **1**, are in low yields. Hence, the further experiments were carried out after a decarboxylation of hydrazides **1** in pyridine to give the corresponding 4-amino-tetrahydro-pyrrolo[1,2-*a*]quinazolines **2** in high yields. Extension of this reaction with 2-acetylbenzoic acid gave the related tetrahydroisoindolo[2,1-*a*]quinazolinediones **4**.

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(3) Zicane, D. R.; Ravina, I. T.; Rijkure, I. A.; Tetere, Z. F.; Gudriniece, E. Yu. and Kalejs, U. O. *Zh. Org. Khim.* **2000**, *36*, 521-526.